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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/672,252	09/28/2000	HELMUT JANSEN	21534	6934

535 7590 01/23/2003

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EXAMINER

MANOHARAN, VIRGINIA

ART UNIT PAPER NUMBER

1764

8

DATE MAILED: 01/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/672,252

Applicant(s)

JANSEN ET AL.

Examiner

Virginia Manoharan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8. 6) ☐ Other: \_\_\_\_\_

Upon reconsideration, the restriction requirement dated October 8, 2002 is hereby withdrawn.

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors e.g. typographical, grammar, idiomatic, syntax and etc. Applicants' cooperations are requested in correcting any errors of which applicants may become aware in the specification.

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. The "or" in "parallel wall elements disposed ... contiguously one above another or one alongside another" is indefinite as two different, unrelated arrangements are being claimed, e.g., in claim 1.

b. The phrased "adapted to" provides for ambiguity and confusion because it is unclear how a structure can be adapted to a function. Could it not performed the function before it was adapted to thus perform?

Deleting "adapted to" numerous recited in the claims would overcome this rejection.

c. The preamble of claim 19 recites "for effecting chemical reaction", however, the body of the claim do not recite nor provide any means for effecting such chemical reaction. The same holds true for claim 1.

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d. Claim 19, line 7, "said" (second occurrence) should be side?

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaibel et al (5,785,819) or Kaibel et al (5,914,012) in view of DE (3135709) or Stout (5,423,952).

Either of the Kaibel et al references discloses a partition for a column for separation of substance comprising at least two mutually parallel wall elements disposed alongside another as recited in claim 1; and "...a column comprising an upright column housing formed internally with at least one vertical partition separating an inlet side of an interior of said column from an outlet side thereof, at least one fitting for introducing a mixture of flowable compounds into said inlet said(sic), at least one lateral fitting for discharging a flowable substance from said outlet side...." as further recited in claim 19.

The apparatus of either the Kaibels' references differs from the claimed invention in that claim 1, for example, recites "a plug or clamp connector along an edge of one of said wall elements receiving an edge of the other wall element".

However, to use said plug or clamp type of wall elements connection in the apparatus of either the Kaibels' references would have been obvious to an artisan as such is conventionally done in the art as shown e.g., in Figs. 1 and 3, and as taught e.g., at column 3, lines 10-14 of the Stout's reference. Note also the abstract of DE '709. To incorporate the elements taught in Stout or DE'709 to the apparatus of either the Kaibels' references would have been obvious to

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one of ordinary skill in the art inasmuch as all the references are directed to the same processing environment, i.e. to a distillation/evaporation apparatus.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


- a. Jansen et al discloses a column for performing thermal separation with two mass exchange packs.
- b. EP '707 discloses a partitioned stripping or absorption section.
- c. Sjoberg et al discloses a partitioned vacuum vessel.
- d. Frankel et al discloses a partitioned evaporator.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Virginia Manoharan whose telephone number is 703-308-3844. The examiner can normally be reached on Tuesday-Friday from 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 703-308-4311. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9462 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

V. Manoharan/mn  
January 22, 2003

  
VIRGINIA MANOHARAN  
PRIMARY EXAMINER  
ART UNIT 133/264

1/22/03